

Rhodora

JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 51.

June, 1949

No. 606

A CHANGE OF STATUS FOR TWO SPECIES OF CHRYSOPSIS

R. K. GODFREY

CHRYSOPSIS GOSSYPINA (Michx.) Nutt., forma **decumbens** (Chapm.), stat. nov. *C. decumbens* Chapm. Flora of the Southern United States, 2nd Ed. 217 (1883); *C. arenicola* Alexander in Small, Manual of the Southeastern Flora, 1339 (1933).

There appear to be no differences in the flowers or fruits as between *Chrysopsis gossypina* and *C. decumbens*. The only observable difference between them is in the character of the pubescence of the peduncles and the involucre. *C. gossypina* has the peduncles and involucre densely cottony-lanate, whereas in *C. decumbens* they are glandular-pubescent. In a series of specimens one of these extremes grades imperceptibly into the other; furthermore, there seems to be no geographic segregation of the extremes. Specimens from a single county in the sandhills of South Carolina, for example, exhibit all the degrees of difference with regard to this characteristic.

Chrysopsis arenicola is, in my judgment, identical with what has been passing as *C. decumbens*. Dr. W. B. Fox and I collected specimens of a decumbent, cottony-lanate *Chrysopsis* in southern Wake County, North Carolina, last autumn (sandy ridge, very near the Wake-Harnett County line on the road between Fuquay Springs and Duncan, *Godfrey & Fox* 48674, Oct. 16, 1948) which, using Small's Manual, I identified as *C. arenicola*. According to Small the species was known only from the sandhills near Hartsville, South Carolina. Subsequently, in determining the identity of other collections of similar appearing plants from elsewhere,

I came to question the existence of *C. arenicola* as an entity distinct from *C. decumbens*. *C. decumbens*, moreover, on the basis of the differences outlined above, did not seem to be sufficiently distinct from *C. gossypina* to be maintained in the specific or the geographic-varietal category.

As for the identity of *Chrysopsis arenicola*, it would seem as though it may have been born of some taxonomic shenanigans. Small's key to the species of *Chrysopsis* (not including the grass-leaved members which he segregates as *Pityopsis*) is so constructed as to key out named sub-groups within the genus. Ordinarily one expects a subdivision of a genus to include species which have certain natural affinities that distinguish them as a group from another group of species with natural relationships. It takes little discrimination, however, to discover that in this case the groupings are of such nature as to violate the principle. Some of the most obviously closely related species fall into different subdivisions. This device serves nicely in the descriptive sequence of the species to keep apart entities which are uncomfortably similar in their characteristics. Thus does *C. arenicola* occupy place number 7 in the sequence, whereas *C. decumbens* is number 11.

For purposes of comparison there is given below the original description of *C. decumbens* and that of *C. arenicola*:

This is Chapman's original description of *C. decumbens* which he had from St. Vincent's Island in W. Florida: "stems decumbent, simple, silky-villous; leaves villous, lanceolate-oblong, obtuse, entire, sessile, leafy in the axils; the lowest spatulate-oblong, clustered; heads large, in a loose corymbose panicle; the peduncles and involucre glandular-pubescent; rays about 25, showy; achenia hairy, furrowed; exterior pappus bristly."

Alexander's description of *C. arenicola* which he had from South Carolina is this: "stem about 3 dm. tall, white cottony: blades of the cauline leaves various, the lower ones slightly broadened upward, 1-3 cm. long, the upper ones oblong-lanceolate to linear-lanceolate, auricled at the base, sessile, all white cottony-lanate: bracts of the involucre rather rough-glandular, the inner bracts narrowly linear, acuminate: achenes about 2 mm. long."

In the same treatment in which Alexander's original description of *C. arenicola* appears (Small, 1933), with glandular peduncles and involucre, *C. decumbens* has lost the glandular character of its peduncles and involucre and its bracts have become sparingly cobwebby! And is it not remarkable that we should find

that *C. arenicola* is keyed to the *Marianae* on the basis of its glandular involucre, while *C. decumbens* is keyed to the *Pilosae* on the basis of an involucre with cobwebby hairs!!

I have before me a co-type of *C. decumbens* and the type of *C. arenicola*. They are a perfect match. In view of all of the above considerations, I am considering *C. gossypina* as including plants not only with cottony-lanate involucres and peduncles, but with forms grading to an extreme having glandular involucres and peduncles, the latter, for the sake of convenience and clarity, to be regarded as a *forma*. *C. arenicola* is relegated to synonymy.

NORTH CAROLINA STATE COLLEGE, Raleigh

NEW MISSOURI PLANT-RECORDS (1946–1948)

JULIAN A. STEYERMARK

SINCE the last report on plants new to Missouri (RHODORA **43**: 658–663. 1941, and **44**: 248. 1942), continued intensive collecting in the state by Mr. Bill Bauer and the writer since the end of the last war has resulted in the discovery of a number of species new to the state. The following are all deposited in the Herbarium of the Chicago Natural History Museum.

BRACHIARIA EXTENSA Chase. This is an unexpected addition to the flora of Missouri. It was previously recorded by Hitchcock in his Manual of the Grasses of the United States, p. 572, from Florida, Louisiana, Texas, Oklahoma, and Cuba. The present collection, *Steyermark 67054*, is from openings along ditch, along road E, sect. 8, 1¼ mi. east of Cooter, Pemiscot Co., October 23, 1948.

At first sight the plant has the appearance of a species of *Panicum* or *Paspalum*. In fact, on a collection by Elihu Hall (no. 814) in the Herbarium of the Chicago Natural History Museum, Engelmann noted "A paspaloid *Panicum* I cannot make out".

SCIRPUS ETUBERCULATUS (Steud.) Kuntze. Another unexpected discovery in Missouri, this species, hitherto supposed to be confined to the Coastal Plain from Delaware to Florida west to Louisiana, was found during the autumn of 1948 in one of the remarkable upland sink-hole ponds of southern Missouri. These ponds, nestling in the midst of a dry upland oak-hickory